

Approved For Release 2009/09/03 : CIA-RDP87M00539R002403920001-8

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**CENTRAL INTELLIGENCE AGENCY**

**WASHINGTON, D. C. 20505**

**PUBLIC AFFAIRS**

**Phone: (703) 351-7676**

**19 December 1985**

Mr. Glenn Diamond  
XOR Corporation  
5421 Opportunity Court  
Minnetonka, MN 55343

Dear Mr. Diamond:

Thank you once again for writing the Central Intelligence Agency.

I am returning your computer games as there is no interest for such software at this time.

Although we cannot be of assistance, your interest is appreciated.

Sincerely,



**PUBLIC AFFAIRS**

STAT

**Enclosure**



L-304A

**EXECUTIVE SECRETARIAT**  
ROUTING SLIP

TO:

		ACTION	INFO	DATE	INITIAL
1	DCI				
2	DDCI				
3	EXDIR		X		
4	D/ICS				
5	DDI				
6	DDA		X		
7	DDO				
8	DDS&T				
9	Chm/NIC				
10	GC				
11	IG				
12	Compt				
13	D/OIJ				
14	D/PAO	X			
15	D/PERS				
16	VC/NIC				
17	D/OIT		X		
18					
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21					
22					

SUSPENSE

Date

Remarks

*ER*

Executive Secretary  
14 Dec 85

3637

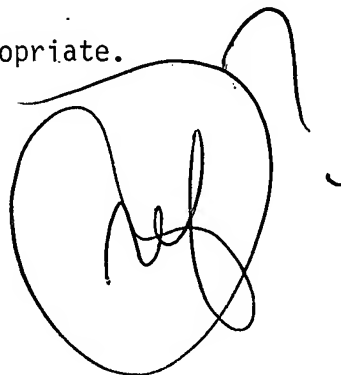
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E.R.

Please route as appropriate.



STAT

Approved For Release 2009/09/03 : CIA-RDP87M00539R002403920001-8

4167/2

**XOR**  
CORPORATION

5421 OPPORTUNITY COURT  
MINNETONKA, MN 55343  
(612) 938-0005

STAT

November 27, 1985

Public Affairs  
Central Intelligence Agency  
Washington DC 20505

Re: Your letter of 12 November 1985.

Thank you very much for your response to my note of October 22nd to the DCI.

Please examine the sample of NFL Challenge and the related support materials. I trust that you will see that the CIA can gain a tremendous amount in terms of public education and public support from being involved in "A Matter for Counter-Intelligence".

Especially see the PC World survey: This demographic group is the core educated support the Intelligence Community needs. Our counter-intelligence simulation has already gathered significant industry interest; its packaging and literature will be as good or better than that of NFL Challenge.

The NFL is happy about NFL Challenge; the CIA will also be happy with an involvement in the next Xor product. The name can be simply "CIA Counterintelligence".

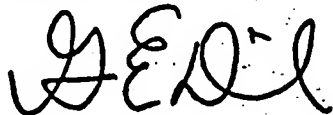
I would like to have the opportunity to make a presentation to you, your section chief, the Chief of the Counterintelligence Staff, and the DCI or DDCI, regarding what Xor has in mind for "CIA Counterintelligence", how we can work together, and other details.

I also encourage you and/or the DCI or DDCI to contact Mr. Bob Carey, president of NFL Properties, for his feelings about the NFL Challenge project. He's at 212-838-0660.

Again, the QM "FBI" series was a hit on network television and a bonanza for the public image and understanding of the Bureau; the Xor "CIA Counterintelligence" software package will be same for the Agency. I will call you in two weeks to hear your comments and suggestions.

Thank you in advance for your assistance in this matter.

Sincerely,



G. E. Diamond  
Central Manager

tr  
Enclosures

DCI  
EXEC  
REG

L-304A



**CENTRAL INTELLIGENCE AGENCY**

**WASHINGTON, D. C. 20505**

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**PUBLIC AFFAIRS**

**Phone: (703) 351-7676**

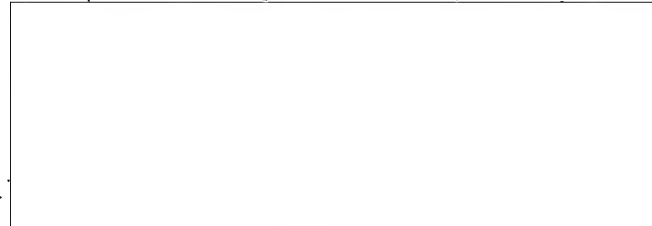
**12 November 1985**

**Mr. Glenn Diamond  
XOR Corporation  
5421 Opportunity Court  
Minnetonka, MN 55343**

**Dear Mr. Diamond:**

**Thank you for writing Mr. Casey, for whom I am responding.**

**I have forwarded your product to the appropriate components of the Agency for their consideration. If there is any interest, you will hear from them directly.**



**Public Affairs**

**STAT**

## ROUTING SLIP

TO:

		ACTION	INFO	DATE	INITIAL
1	DCI		X		
2	DDCI				
3	EXDIR		X		
4	D/ICS				
5	DDI				
6	DDA		X		
7	DDO				
8	DDS&T				
9	Chm/NIC				
10	GC				
11	IG				
12	Compt				
13	D/OLL				
14	D/PAO	X			
15	VC/NIC				
16	D/OIT		X		
17	ER				
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		SUSPENSE _____ Date			

Remarks

TO #14: Please prepare an appropriate response.

STAT

Executive Secretary

30 OCT 85

Date

3637 (10-81)

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**XOR**  
CORPORATION

10-22

Dear Mr. Carey:

A year ago I met you at  
AFIO dinner and showed you  
my possible IBM PC software<sup>†</sup> that  
would simulate the intelligence brokers  
in a way that would benefit the  
Community and the Country.

My first product, NFK Challenge,  
is a hit this fall (see cover of PC  
World enclosed). See NFK release.

I am interested as to what kind

† attached

next







5421 OPPORTUNITY COURT  
MINNETONKA, MN 55343  
(812) 938-0006

-2-

of Cooperation I can get  
from you and your staff  
(particularly CI) for the project

This product could be the "FBI"  
(ABC series by QM) of software  
and I would like your support  
and endorsement. You'll not  
regret it.

Also enclosed is a paper summarizing  
a talk I gave to a Consultant to the  
Community on Calibrating Analysts.

Sincerely,

*[Handwritten signature]*

Clay Diamond

Attachment  
Enclosure

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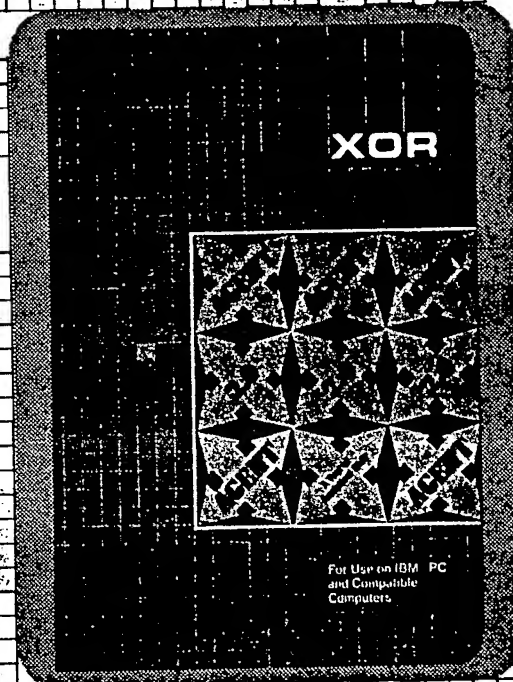
# AGENT 2.0™

## A Test of Analytical Skill

AGENT 2.0 is a test of your analytical skills that challenges your information processing ability. You have the information. Is the crisis real or imagined? Is the spy ours or theirs? Is the file fact or fiction? You must decide the truth of Operation Kaleidoscope. Agent 2.0 is a counterespionage adventure, in-basket exercise, and PC DOS tutorial all combined into first class software. Created by Michael de St. Hippolyte.

Requires IBM® PC with DOS 2.0, 128K memory, color/graphics adapter, and color monitor.

IBM is a registered trademark of International Business Machines Corporation.



3-D Spreadsheets

# PC WORLD

November 1985 \$2.95  
Canada & Foreign \$3.95

The Comprehensive Guide to  
IBM Personal Computers and Compatibles

JOE VACCARO  
Plays NFL  
Challenge

NON-VOLUNTARY  
SINCE GAMING

NOVEMBER 1985

PC WORLD COVER: "JOE MONTANA PLAYS NFL CHALLENGE"

New York, New York, October 28, 1985 — The National Football League has joined the personal computer world with the introduction of its officially-licensed simulation of NFL football, NFL Challenge, which graces the cover of the November issue of PC World, the IBM PC world's largest publication.

PC World's cover story, "Joe Montana Plays NFL Challenge", gives NFL Challenge high praise indeed. Says John Bello, executive vice president of NFL Properties, the licensing arm of the NFL, "We have been watching the steady growth and rising prominence of personal computers in our society and felt that the time had come for the NFL to get involved. And we're really pleased with NFL Challenge."

David Bunnell, Publisher of PC World, says, "When IBM got involved in personal computing, it was big news, but it was expected. The NFL getting into personal computing is unexpected, and it is very exciting. It allows PC World to put NFL Challenge and Joe Montana on the cover."

The November issue of PC World is available on newsstands nationwide. In his conclusion, PC World associate editor Eric Brown writes, "... NFL Challenge is great fun. It's been a long time since a program has consistently kept me up until 3 in the morning... Sophisticated simulation games such as NFL Challenge might provide the spark that's been missing from the world of PC's."

NFL Challenge is an extremely sophisticated simulation of NFL football that uses all of the features of the IBM Personal Computer and its pure compatibles. It has many sophisticated features and features state-of-the-art animated graphics of actual football plays.

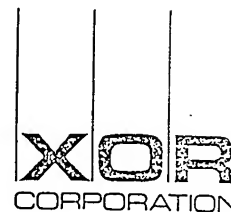
In the feature article, 49ers star quarterback Joe Montana plays a quarter of NFL Challenge against Brown in a replay of Super Bowl XIX. Montana, coaching the 49ers, takes the ball down the field to score on his first drive, highlighted by a big fourth-and-one 14-yard touchdown pass to Dwight Clark. The quarter ended with the 49ers leading 13-3.

NFL  
is  
happy,  
CIA  
will  
be  
too.

CC-Mr. Casey  
DCI

Sent  
for  
Intel

-2-



Brown describes Montana reacting to the animated play graphics of one play: "I need help," he said as he saw the eight rushers draw a bead on his on-screen doppelganger. "Oh, man. What's he throwing to the weak side for?" "Pass incomplete."

Montana's reaction to NFL Challenge? "I think it's great," he was quoted as saying. "I especially like the idea that you can use the Undo key to see what would have happened if you had called another play. You don't get that luxury on the field."

*we did good*

NFL Challenge was developed by Minnesota-based Xor Corporation under a license from NFL Properties. Says Buddy Diamond, Xor's founder, "Our crack team of Harvard and Stanford wiz kids was told to push back the outside of the envelope as far as the IBM PC is concerned, and they did it. And our package, created by NFL Properties' Creative Services Division, which includes the highly informative NFL Illustrated Playbook, is the best in our industry."

The product is available in hundreds of retail stores nationwide, including B. Dalton Software Etc., Warehouse Entertainment, ComputerCraft, Schaak Electronics, and Lechmere Sales. It costs \$99.95. Said John Dvorak, noted computer columnist for the San Francisco Examiner, "If there's a computer game worth \$99.95, this is it, believe me."

Brown's comment in his article sums it up: "NFL Challenge is more than a game; it's a close simulation that can teach you a lot about football." For the millions of IBM personal computer users interested in the NFL, NFL Challenge is a dream come true.

*QED*

-30-

## Xor Corporation

Summary of Fifty Runs of Vikings at Bears.

Simulation Run October 22, 1985.

Uses full-strength end-1984 rosters so best use of results is in evaluating season-to-season change. To edit to 1985 rosters for customized simulation, see NFL Challenge User's Guide pages 17, 18, and 36. NFL Challenge Simulation Version VI.03

Bears won 45.0 of 50.0 games played  
Vikings won 5.0 of 50.0 games played

## Average Results from 50 games played

Team Points	Bears 25	Vikings 13
First Downs	23	14
Rn - Ps - Pn	11 - 11 - 1	4 - 9 - 1
3rd Dn Convs	6 - 13 - 46.2%	4 - 12 - 33.3%
Time of poss	35:16	24:50
Total Net Yds	356	213
Plays - Avg	64 - 5.6	52 - 4.1
Net Yds Rush	189	79
R Plays - Avg	40 - 4.7	22 - 3.6
Net Yds Pass	167	134
At - Cp - Int	23 - 13 - 1	26 - 13 - 1
Average Pass	7.0	4.5
Sacks - Yds	1 - 5	4 - 31
Punts - Avg	4 - 39.5	6 - 40.8
Return Yds	119	127
Penalty - Yds	6 - 47	4 - 34
Fumble - Lost	2 - 1	1 - 1

## Minimum Results from 50 games played

Team Points	Bears 10	Vikings 0
First Downs	7	3
Rn - Ps - Pn	3 - 4 - 0	1 - 2 - 0
3rd Dn Convs	2 - 7 - 28.6%	0 - 8 - 0.0%
Time of poss	23:59	17:50
Total Net Yds	159	91
Plays - Avg	42 - 3.8	28 - 3.3
Net Yds Rush	82	30
R Plays - Avg	27 - 3.0	11 - 2.7
Net Yds Pass	77	61
At - Cp - Int	15 - 7 - 0	17 - 7 - 0
Average Pass	5.1	3.6
Sacks - Yds	0 - 0	0 - 0
Punts - Avg	0 - 0.0	1 - 44.0
Return Yds	29	37
Penalty - Yds	1 - 10	1 - 10
Fumble - Lost	0 - 0	0 - 0

## Maximum Results from 50 games played

Team Points	Bears 55	Vikings 27
First Downs	41	32
Rn - Ps - Pn	18 - 19 - 4	12 - 17 - 3
3rd Dn Convs	13 - 19 - 68.4%	9 - 19 - 47.4%
Time of poss	42:10	36:01
Total Net Yds	639	402
Plays - Avg	92 - 6.9	88 - 4.6
Net Yds Rush	302	142
R Plays - Avg	57 - 5.3	35 - 4.1
Net Yds Pass	337	260
At - Cp - Int	32 - 20 - 3	44 - 23 - 3
Average Pass	9.6	4.9
Sacks - Yds	3 - 18	9 - 68
Punts - Avg	8 - 44.3	9 - 42.6
Return Yds	258	245
Penalty - Yds	11 - 93	8 - 74
Fumble - Lost	6 - 4	4 - 4

Mr. Carey  
Output  
from  
NFL  
Challenge  
for  
Sunday's  
big  
NFL  
game  
DA

CC-Mr. Carey, DCI

"Understandably or  
Intelligence methods

A Microcomputer Program for Calibrating Intelligence Analysts  
by Glenn E. Diamond, Xor Corporation

"It is likely that most analysts, most of the time, are not even aware of the background level of uncertainty because their job is to bring reason out of the chaos, not to study the chaos itself."

-- Fredric S. Feer  
Analytical Assessments Corporation  
Colloquium on Analysis and Estimates (1979)  
Consortium for the Study of Intelligence

A. Generally.

In the intelligence production system, the Analyst could be said to be a knowledge worker who fashions information from data for action by the policymakers and decisionmakers of national government.

Analysts, just like fine machine tools, must be calibrated constantly to assure that their outputs are within acceptable tolerances demanded by the end users of the product. Surely, a normal result of all human analysis is partial error. To paraphrase Bishop Berkeley: To be is to be deceived.

In each analysis, the analyst uses critical judgments, assumptions, and logic upon the data to create information in usable form. Rarely does the analyst have the time, inclination, or bureaucratic imperative to do these two things: a) Seek and incorporate into analysis raw intelligence that has been filtered out of collection output due to it being false, erroneous, or based on deception as determined by counterintelligence, or b) Systematically analyze the critical judgments, assumptions, and logic underlying the analysis from a counterintelligence perspective.

B. Calibration Important.

An analyst out of calibration is susceptible to preconception, self-deception, and external deception. Analysts are the target of strategic deception; we know that. Deception is expanding exponentially now; we know that. Yet we depend on intelligence analyses and estimates in formulating our national policy.

A properly calibrated analyst will "turn over as many rocks" as necessary to produce good intelligence product. This is an art; if too many "rocks" are turned over, the product has decayed past its half-life, if too few, the product is more opinion than information as it was fermented from tunnel-vision or myopia or preconception or premature cognitive commitment (Harvard's E. J. Langer's term).

Calibration of the analyst is an example of integrating counterintelligence into all aspects of the intelligence production system. In fact, the modern analyst must have an "on-board counterintelligence module".

In a state-of-the-art intelligence production system, the counterintelligence staff analyzes the analysts who have already analyzed themselves. All collected data should pass to analysis unfiltered, but counterintelligence-rated.

C. The Simulator.

A microcomputer-based (hence portable) program can be developed which, though abstract in nature, can enable an analyst or the analyst's superiors or counterintelligence to check analyst calibration.

It will present to the analyst a "test pattern" over which the analyst can lay a specific analysis for calibration:

1. Identifies data universe of analysis.
2. Uses "n-1, n+1" rule to reach contradiction point.
3. Identifies critical judgments and assumptions.

Can help  
all U.S.  
people  
who are  
involved  
with  
decision  
and/or  
trust.

Page Two

4. Uses "disconfirmed disconfirmation" to check logic.
5. Builds "matrix of analyses" off of analysis.
6. Analyst analyzes analysis of analysis with manager.

The result of this activity can produce useful information for the analyst, intelligence management, and counterintelligence to create multi-leveled all-source deception insurance. That is what must be done.

For instance, step one assures that an acceptable universe of data was analyzed. That implies data of all "vectors" and "scalars", including negative data, uncertain data, false data, deception data, etcetera.

Step two alters that universe in many ways to ascertain at what point the analysis breaks down or contradicts itself. This rates the calibration of the analyst in his data acquisition function, and especially pointing out anchoring biases.

Step three is an important process as the analyst analyzes the analysis; dissects it for the additional tests. The quality of this dissection is an important calibration check too, since if the checking is sub-standard the analysis will tend to head in that direction.

Step four is the falsification test. An analysis must be falsifiable to be usable as finished intelligence product. Every disconfirming element must be reckoned and either confirmed or disconfirmed. Which leads to step five, wherein all the various possible analyses branching from the main analysis are elaborated. Of course, absolute disconfirmation (the disconfirming of all disconfirmations) is an "A". One thing the analyst will learn from this program is that A's are seldom given.

In step six, with other staff, the analyst grades the analysis and re-calibrates. A record should be kept to aid in future evaluations of the analyst's analyses and estimates and to assist the analyst from time to time.

#### D. The Goal.

The major problem in analyst training and evaluation is the problem of defining the analyst itself. This program ends up there. The modern analyst in the modern intelligence production system probably needs to be evaluated not in academic terms, but as the hybridization of collector, counterintelligence, and collator. The shoe-box gives way to Arthur C. Clarke's "monolith". And objective and subjective observation of the analyst-in-calibration would be high-quality grist for the counterintelligence mill.

Though Don Quixote said "facts are the great enemy of truth", it is important to state that when in a near-infinite potential data environment, the analysis supercedes the data as the fundamental weakness. A finite set of data analyzed infinitely will yield more "fungible truth" than an infinite set of data analyzed finitely.

The Analyst Function can be refined and refined. If we analyze it.

The End.

Glenn E. Diamond is the founder of Xor Corporation, an IBM PC software development house in Minnetonka, Minnesota that specializes in advanced simulation work. Its first simulation for the consumer market, the popular "NFL Challenge", officially-licensed by the NFL, is the cover story topic in the November issue of PC World: "Joe Montana plays NFL Challenge". Mr. Diamond is a recognized technological thinker who has made contributions in the fields of third world industrial development ("Export Development Functionality with an Import Substitution Form Factor for an Optimal Industrial Development Velocity per Increment of Domestic Resource Costs Employed", AAPRD, 1981) and conventional deterrence ("Robotic Armored Infantry Command for Ultimate Conventional Deterrence Along the NATO Central Army Group Front", D&FA-ISSA, 1983).